IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (previously presented) An image processing program on a computer readable medium for realizing on a computer:

a normalizing function normalizing a feature quantity of an image through conducting a range transformation which allows the feature quantity of the image to be distributed over a whole range;

a statistics extracting function extracting a mean value and a standard deviation of the normalized feature quantity of the image;

an image condition judging function judging an image condition, based on the extracted mean value and the extracted standard deviation;

a correction information creating function creating image correction information in the judged image condition based on the extracted mean value and the extracted standard deviation; and

an image correcting function correcting the image, based on the created image correction information.

2. (original) An image processing program according to claim 1,

wherein said image condition judging function judges the image condition of said image through a two-dimensional normal distribution probability function for calculating the probability that an image belongs to each image condition, in which the mean value and the standard deviation of the image feature quantity are set to variables.

3. (original) An image processing program according to claim 2,

wherein when the maximum value of said probability is larger than a predetermined value, said image condition judging function judges that the image condition which becomes said probability is the image condition of said image.

4. (original) An image processing program according to claim 2,

wherein when the maximum value of said probability is a predetermined value or less, said image condition judging function judges that said image belongs to a plurality of image conditions.

5. (original) An image processing program according to claim 4,

wherein when it is judged by said image condition judging function that said image belongs to the plurality of image conditions, said correction information creating function integrates the image correction information in the respective image conditions, corresponding to said probability, to create the image correction information.

6. (original) An image processing program according to claim 1,

wherein said statistics extracting function multiplies the mean value and the standard deviation of the image feature quantity in each area obtained by dividing the image into a plurality of areas, by a weighting value corresponding to a difference between the maximum value and the minimum value of the image feature quantity in each area, and sets the sum of said multiplied values as the mean value and the standard deviation of the image feature quantity.

7. (previously presented) An image processing program according to claim 1, further comprising:

an input function inputting whether or not the corrected image is an intended image;

an input result storing function storing a result input through said input function; and

a probability display function displaying the probability that said corrected image is the intended image, based on the input result stored by said input result storing function.

8. (previously presented) A computer-readable recording medium recorded with an image processing program for realizing on a computer:

normalizing a feature quantity of an image through conducting a range transformation which allows the feature quantity of the image to be distributed over a whole range; extracting a mean value and a standard deviation of the normalized feature quantity of the image;

judging an image condition, based on the extracted mean value and the extracted

standard deviation;

creating image correction information in the judged image condition based on the extracted mean value and the extracted standard deviation; and

correcting the image, based on the created image correction information.

9. (previously presented) A computer-readable recording medium recorded with an image processing program according to claim 8,

wherein said judging judges the image condition of said image through a two-dimensional normal distribution probability function for calculating the probability that an image belongs to each image condition, in which the mean value and the standard deviation of the image feature quantity are set to variables.

10. (previously presented) A computer-readable recording medium recorded with an image processing program according to claim 9,

wherein when the maximum value of said probability is larger than a predetermined value, said judging judges that the image condition which becomes said probability is the image condition of said image.

11. (previously presented) A computer-readable recording medium recorded with an image processing program according to claim 9,

wherein when the maximum value of said probability is a predetermined value or less, said judging judges that said image belongs to a plurality of image conditions.

12. (previously presented) A computer-readable recording medium recorded with an image processing program according to claim 11,

wherein when it is judged by said judging that said image belongs to the plurality of image conditions, said creating integrates the image correction information in the respective image conditions, corresponding to said probability, to create the image correction information.

13. (previously presented) A computer-readable recording medium recorded with an image processing program according to claim 8,

wherein said extracting multiplies the mean value and the standard deviation of the image feature quantity in each area obtained by dividing the image into a plurality of areas, by a weighting value corresponding to a difference between the maximum value and the minimum

value of the image feature quantity in each area, and sets the sum of said multiplied values as the mean value and the standard deviation of the image feature quantity.

14. (previously presented) A computer-readable recording medium recorded with an image processing program according to claim 8, further comprising:

inputting whether or not the corrected image is an intended image;

storing a result input through said inputting; and

displaying the probability that said corrected image is the intended image, based on the input result stored by said storing.

15. (previously presented) An image processing method comprising:

normalizing a feature quantity of an image through conducting a range transformation which allows the feature quantity of the image to be distributed over a whole range;

extracting a mean value and a standard deviation of the normalized feature quantity of the image;

judging an image condition, based on the extracted mean value and the extracted standard deviation;

creating image correction information in the judged image condition based on the extracted mean value and the extracted standard deviation; and

correcting the image, based on the created image correction information.

16. (previously presented) An image processing apparatus comprising:

normalizing means for normalizing a feature quantity of an image through conducting a range transformation which allows the feature quantity of the image to be distributed over a whole range;

statistics extracting means for extracting a mean value and a standard deviation of the normalized feature quantity of the image;

image condition judging means for judging an image condition, based on the extracted mean value and the extracted standard deviation;

correction information creating means for creating image correction information in the judged image condition based on the extracted mean value and the extracted standard deviation; and

image correcting means for correcting the image, based on the created image correction information.